



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/560,172

11/30/2006

Yoji Kameo

283020US0CT

1452

22850

7590

05/26/2010

OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P.  
1940 DUKE STREET  
ALEXANDRIA, VA 22314

EXAMINER

KRAUSE, ANDREW E

ART UNIT

PAPER NUMBER

1781

NOTIFICATION DATE

DELIVERY MODE

05/26/2010

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com  
oblonpat@oblon.com  
jgardner@oblon.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/560,172	<b>Applicant(s)</b> KAMEO ET AL.	
	<b>Examiner</b> ANDREW KRAUSE	<b>Art Unit</b> 1781	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 February 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-26,28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2,4-26,28-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                     |                                                                   |
|-------------------------------------------------------------------------------------|-------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____                                                         | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. **Claims 1-2, 4-5, 7-26, 28** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki (JP-1996-08266211, English Translation) in view of Nelson (US 4,456,626).
3. 'Turning the Heat Up on Crisco (and Lard)' is cited as evidence.
4. Kawasaki generally discloses a bread quality improver comprising edible oil, emulsifiers, and a protein powder [0006].
5. Regarding claims 1 and 2, exemplary compositions are disclosed containing 59-74% rapeseed salad oil (canola oil), which possesses the fatty acid composition required, about 26% of lecithin and glycerol fatty acid ester as emulsifiers, and about 6-10% of a humectant protein (Table 1). The ratio of oil (A) to emulsifier (B) in these examples is about 2.25-2.8.
6. Kawasaki discloses a fat and oil composition for bakery products wherein the emulsifier comprises about 75 % glycerol fatty acid ester and lecithin (15% with 5%

lecithin [0012]), but fails to disclose the presence of propylene glycol fatty monoester as part of the emulsifier system. Nelson, like Kawasaki, discloses emulsified fat and oil compositions comprising fats such as rapeseed oil (col. 2, lines 34-44) emulsified with 13 to 35% of an emulsifier, wherein the emulsifier comprises polyglycerol fatty acid monoester (noted by Kawasaki to be within the emulsifiers indicated by glycerol fatty acid esters ([0008]) in combination with propylene glycol fatty acid monoester in a ratio of 1:2 (col. 2, lines 10-20). It would have been obvious to one having ordinary skill in the art at the time of the invention to modify the emulsified oil composition for bakery products disclosed by Kawasaki by replacing the glycerol fatty acid ester/lecithin emulsifier system with the propylene glycol fatty acid monester/polyglycerol fatty acid monoester emulsifier system disclosed by Nelson, as it would require the substitution of equivalent emulsifier systems known in the art for producing emulsified bakery fats.

7. Regarding claim 5, Kawasaki discloses the fat and oil composition of claim 1, but does not disclose the degree of penetration for the composition. However, one having ordinary skill in the art would expect the fat and oil composition of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the degree of penetration.

8. Regarding claim 7, Kawasaki discloses producing Pullman bread comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, and 5 parts of

shortening (fat) ([0021]). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range.

9. Regarding claim 10, Kawasaki discloses bread of claim 7, but does not disclose the stress of the bread upon 50% compression after 3 days storage at 20 C in N.

However, one having ordinary skill in the art would expect the bread of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the stress of the bread upon compression.

10. Regarding claim 11, the bread is sliced ([0023]).

11. Regarding claim 28, Kawasaki discloses the production of bread using the composition of claim 1 ([0022]).

12. Regarding claims 12, 15, 16, Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, and 5 parts of shortening (fat) ([0021]). As seen in 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range. Kawasaki discloses the use of the bread improver in breads comprising about 5 parts sugar per 100 parts of flour. The breads disclosed in Kawasaki are Pullman type breads, which are generally known in the art to be relatively non-sweet, sandwich loaves. However, it is well known in the art to produce sweet-breads comprising higher levels of sugar and shortening, and it would have been obvious to one having ordinary skill in the art at the

time of the invention to produce a sweetened bread using the bread improver of Kawasaki, as the incorporation of the quality improver in breads allows preservation of the breads flavor and texture, even after multiple days of storage ([0022]). Although Kawasaki does not disclose the stress of the bread upon 50% compression after 3 days storage at 20 C in N, one having ordinary skill in the art would expect a sweetened bread produced using the bread improver of Kawasaki, having the formulation as claimed, to possess the same physical properties, including the stress of the bread upon compression.

13. Regarding claims 17, 19, Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, 5 parts of sugar, and 5 parts of shortening (fat) ([0021]). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range.

Although the level of shortening present in the types of bread produced by Kawasaki is lower than claimed, it is well known in the baking art to produce brioche-type breads, which are enriched by high levels of shortening. As the bread improver of Kawasaki allows preservation of the breads flavor and texture, even after multiple days of storage ([0022]), it would have been obvious to one having ordinary skill in the art at the time of the invention to include the bread improver in highly shortened bread, such as brioche.

Regarding claims 24 and 26, brioche is known within the art as a cake-type product, and would be expected to have the claimed properties.

14. Regarding claims 20-22 Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, 5 parts of sugar, and 2.2 parts yeast ([0021]). Kawasaki discloses immediate baking of the bread. However, within the baking art, it is well known to freeze finished dough in order to provide a bakery product that can be freshly baked by the consumer. The level of yeast disclosed in Kawasaki is slightly lower than the claimed 3 parts yeast; however, one having ordinary skill in the bread-baking art at the time of the invention would find it obvious to adjust the quantity of yeast used in order adjust the texture and rise of the bread as a matter of routine skill in the art.

15. Regarding claims 8 and 9, Kawasaki discloses producing Pullman bread comprising per 100 parts flour, 2 parts of a bread quality improver, and 5 parts of shortening (fat) ([0021]). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range. In using the bread quality improver according of Kawasaki and Nelson as in claim 1, one would expect the bread quality improver portion of the bread to comprise 59-74% rapeseed salad oil (canola oil), which possesses the fatty acid composition required, about 26% polyglycerol fatty acid monoester/ with propylene glycol fatty acid monoester in a ratio

of 1:2, and about 6-10% of a humectant protein (Table 1). One would then expect at least about 1.18 parts liquid oil, .5 parts emulsifier, and about .12 parts of humectant.

16. Regarding claims 13 and 14, Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of a bread quality improver, and 5 parts of shortening (fat) ([0021]). As seen in 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range. Kawasaki discloses the use of the bread improver in breads comprising about 5 parts sugar per 100 parts of flour. The breads disclosed in Kawasaki are Pullman type breads, which are generally known in the art to be relatively non-sweet, sandwich loaves. However, it is well known in the art to produce sweet-breads comprising higher levels of sugar and shortening, and it would have been obvious to one having ordinary skill in the art at the time of the invention to produce a sweetened bread using the bread improver of Kawasaki, as the incorporation of the quality improver in breads allows preservation of the breads flavor and texture, even after multiple days of storage ([0022]). In using the bread quality improver according to Kawasaki and Nelson as in claim 1, one would expect the bread quality improver portion of the bread to comprise 59-74% rapeseed salad oil (canola oil), which possesses the fatty acid composition required, about 26% polyglycerol fatty acid monoester/ with propylene glycol fatty acid monoester in a ratio of 1:2, and about



6-10% of a humectant protein (Table 1). One would then expect at least about 1.18 parts liquid oil, .5 parts emulsifier, and about .12 parts of humectant.

17. Regarding claim 18, 25 Kawasaki discloses a bread composition comprising per 100 parts flour, 2 parts of the bread quality improver as in claim 1, 5 parts of sugar, and 5 parts of shortening (fat) ([0021]). As evidenced by 'Turning the heat up on Crisco (and Lard)', common shortenings possess melting points within the claimed range.

Although the level of shortening present in the types of bread produced by Kawasaki is lower than claimed, it is well known in the baking art to produce brioche-type breads, which are enriched by high levels of shortening. As the bread improver of Kawasaki allows preservation of the breads flavor and texture, even after multiple days of storage ([0022]), it would have been obvious to one having ordinary skill in the art at the time of the invention to include the bread improver in highly shortened bread, such as brioche.

In using the bread quality improver according of Kawasaki and Nelson as in claim 1, one would expect the bread quality improver portion of the bread to comprise 59-74% rapeseed salad oil (canola oil), which possesses the fatty acid composition required, about 26% polyglycerol fatty acid monoester/ with propylene glycol fatty acid monoester in a ratio of 1:2, and about 6-10% of a humectant protein (Table 1). One would then expect at least about 1.18 parts liquid oil, .5 parts emulsifier, and about .12

parts of humectant. Additional fat and oil would be contributed by the shortening used in the composition.

18. Regarding claim 23, Kawasaki discloses the bread according to claim 22. In using the bread quality improver according of Kawasaki and Nelson as in claim 1, one would expect the bread quality improver portion of the bread to comprise 59-74% rapeseed salad oil (canola oil), which possesses the fatty acid composition required, about 26% polyglycerol fatty acid monoester/ with propylene glycol fatty acid monoester in a ratio of 1:2, and about 6-10% of a humectant protein (Table 1). One would then expect at least about 1.18 parts liquid oil, .5 parts emulsifier, and about .12 parts of humectant.

19. **Claims 6, 29** are rejected under 35 U.S.C. 103(a) as being unpatentable over Kawasaki (JP-1996-08266211, English Translation) in view of JP 5818030 (Dialog abstract, hereafter '030).

20. Kawasaki discloses the oil or fat composition of claim 1, wherein the component (C) is a protein, rather than a thickening polysaccharide. However, '030 discloses a bakery fat composition comprising an emulsified oily phase comprising an edible emulsifier (a) and a viscosity increasing agent (b), which may be a protein as in Kawasaki; or alternatively, a thickening polysaccharide such as xanthan or locust bean gum. Given this disclosure, it would have been obvious to one having ordinary skill in

the art at the time of the invention to substitute the protein component used in Kawasaki with a thickening polysaccharide, as such a replacement would involve the substitution of compounds known in the art to be functional equivalents as evidenced in '030.

***Response to Arguments***

21. Applicant's arguments filed 2/17/10 have been fully considered but they are not persuasive.

22. Applicant argues that the emulsifiers of Nelson and Kawasaki differ as "the emulsifiers disclosed by Nelson are hydrophilic whereas the emulsifiers disclosed by Kawasaki are lipophilic/hydrophobic". To support this argument, applicant states that 'glycerine fatty monester, like that disclosed by Kawasaki, is a lipophilic compound', whereas the polyglycerol monoester in Nelson is hydrophilic. However, the component used in Kawasaki is not limited to glycerine fatty monoester, and may include polyglycerol fatty monoesters ([0008] of Kawasaki).

23. With respect to applicants argument stating that the claimed invention possesses an improved uniform dispersion of the claimed humectant in the oil component, it appears that this advantage occurs as a result of the method of manufacture and specific processing conditions which are not claimed (p. 10, last paragraph, "That is, when the emulsifier is crystallized by cooling, rapid cooling is more preferable than gradual

cooling because coarse crystals of the emulsifier are not formed, thus improving the dispersibility of the emulsifier itself and promoting the staleness-preventing effect<sup>o</sup> In the production.

### *Conclusion*

24. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANDREW KRAUSE whose telephone number is (571)270-7094. The examiner can normally be reached on 7:30-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith Hendricks can be reached on (571)272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Lien T Tran/  
Primary Examiner, Art Unit 1781

/ANDREW KRAUSE/  
Examiner, Art Unit 1781  
25.